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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,577

12/14/2005

Pascal Denolly

Q88613

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EXAMINER

VU, QUYNH-NHU HOANG

ART UNIT	PAPER NUMBER
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3763

MAIL DATE	DELIVERY MODE
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05/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,577

Applicant(s)

DENOLLY, PASCAL

Examiner

Quynh-Nhu H. Vu

Art Unit

3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/17/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 06/17/05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

Claims 1-11 are objected to because of the following informalities: the examiner suggests that the term "characterized in" in claims 1-11 should be change to "wherein". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, applicant states that: "a tube (60) for the injection...into the chamber (62) of the distributor" (lines 8-9). But then, the applicant states that: "...**only one of the injection tubes**..." (lines 17-18). Does applicant mean that there are more than one the injection tubes? According to the specification, there is only one injection tube 60.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duchon et al. (hereinafter 'Duchon') (US 2002/0151854) in view of Oscarsson et al. (hereinafter 'Oscarsson') (US 4,645,496).

Regarding claims 1-4, 8, Duchon discloses, in Figs. 1 and 7A-7D, a distribution device for a system 10 for delivery of medical fluids to a patient, of the type comprising:

- a syringe body 18,
- a distributor 26 comprising a body
- a feed tube (the tube connected to reservoir bottle 22) for an active medical fluid, opening into the syringe body 18 and designed to be connected to a reservoir 22 for the said active fluid,
- a tube 80 (Fig. 7) for the injection of this active fluid connected to a distal extremity of the syringe body (30) and opening into the chamber of the distributor,
- a pressurised tube 28 designed to be connected to the patient and opening into the chamber of the distributor, and
- a pressure measurement tube 90 designed to be connected to a line for measuring the pressure of the system and opening (via connected to the chamber) into the chamber of the distributor, this distributor comprising within the fluid connection chamber a slide 362 which can move in relation to the body of the device and a resilient member 372 placed between the slide 362 and fixed part (part 26 is considered fixed part) of the distributor body, this

distributor being designed to provide an automatic connection via the said chamber between the pressurised tube 28 and the injection tubes 80 and the pressure measurement tube 90 through the action of the pressure of the medical fluid and the resilient member 372 ;

wherein that the device also comprises a flush tube 42 which is separate from the other tubes and comprising a first section which is designed to be connected to a reservoir 50 for a flush medical, a second section connected into the chamber (thru via the tubes 42 and 90).

However, Duchon does not disclose a valve with a plug which can be moved manually. Oscarsson discloses a valve device (Figs. 1-7) has a cylindrical drum element rotatably mounted within a chamber of a body member and able to adjust the flow rate by manually (see abstract). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Duchon with a two-way cock valve, as taught by Oscarsson, to manually control the fluid into the system.

Regarding claims 5-7, the two-way cock valve further comprises that a plug and a means for resiliently returning the valve into its closed position. A flexible blade (150) mechanically connected to the valve (Figs. 3, 5-7).

Regarding claims 9-10, Duchon further discloses the feed tube (the tube connected to reservoir bottle 22) feeding the first active medical fluid is bounded by the distributor; the feed tube (the part 78 of the feed tube) and the injection tube 80 are in parallel directions (see Fig. 7)

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Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duchon et al. (hereinafter 'Duchon') (US 2002/0151854) in view of Houde et al. (hereinafter 'Houde') (US 2004/0082904).

Regarding claim 11, Duchon discloses a pressurized line (pressurized tube 28) comprising at one extremity a catheter 30 designed to be inserted into the patient's body; a pressure measurement line 90 or 92 incorporating a conduit fitted with a pressure sensor (pressure transducer 38 must have pressure sensor) and designed to be connected to the pressure measurement tube 90; and a flush line 22 comprising a flexible conduit fitted with a drip chamber (a bottom part with funnel-shaped of saline bag 50) and designed to be connected at the reservoir 50 for a flush solution. Duchon is silent about the feed line (line 78) comprising a flexible tube.

Houde discloses that a distribution system comprising a feed line (28a) for contrast product (12) comprising a flexible conduit (13) fitted with the contrast source (12).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Duchon with a feed line connected with flexible conduit, as taught by Houde, to provide communication between the contrast fluid supply to the syringe.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

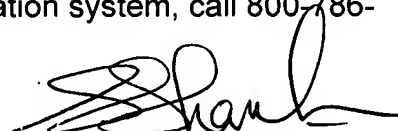
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Harrison et al (US 5,423,751); Houde et al. (US 2004/0082904), Brown (US 4,608,996), Hart et al. (US 2002/0123737), Hart et al. (US 6,699,232) disclose a fluid control system for delivery of medical fluids to a patient comprising: a syringe body, a feed tube, a catheter to connected to the patient, a pressure measurement tube, the flush tube and the valve to control the flow in the system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh-Nhu H. Vu whose telephone number is 571-272-3228. The examiner can normally be reached on 6:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on 571-272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LOAN H. THANH
PRIMARY EXAMINER

QNV
05/03/07